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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,990	01/23/2001	Diane R. Hammerstad	10005378-1	4199

7590 05/20/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

DURAN, ARTHUR D

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,990

Applicant(s)

HAMMERSTAD, DIANE R.

Examiner

Arthur Duran

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

EA

DETAILED ACTION

1. Claims 1-16 have been examined.

Response to Amendment

2. The Amendment filed on 1/18/05 is sufficient to overcome the Alberts reference. A new reference has been added to the 35 USC 103 rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are rejected under 35 U.S.C. 101 because these claims have no connection to the technological arts. The method claims do not specify how the claims utilize any technological arts. For example, no network or server is specified. To overcome this rejection, the Examiner recommends that the Applicant amend the claim to specify or to better clarify that the method is utilizing a medium or apparatus, etc within the technological arts. Appropriate correction is required.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to

Art Unit: 3622

"[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673

Art Unit: 3622

(1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*.

Art Unit: 3622

However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the current application, no technological art (i.e., computer, network, server) is being utilized by claims 1-8. At least one step of the body of the claims must explicitly utilize the technological arts. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Alberts 5,937,392 (8/10/1999) (herein referred to as "Alberts") in view of Tso (6,047,327).

Claims 1-16: As per independent claim 1, Alberts (the ABSTRACT; FIG. 1; FIG. 2; FIG. 3; FIG. 6a; FIG. 6b; col. 1, ll. 5-67; col. 2, ll. 1-67; col. 3, ll. 1-67; col. 4, ll. 1-67; col. 5, ll. 1-67; col. 6, ll. 1-67; col. 7, ll. 1-52) implicitly shows all the elements and limitations of claim 1.

Art Unit: 3622

Alberts lacks explicit recitation of the phrase “storing said subscriber advertising profile at the server. . . .”; however,

It would have been obvious at the time the invention was made to a person having ordinary skill in the art that the disclosure of Alberts (the ABSTRACT; FIG. 1; FIG. 2; FIG. 3; FIG. 6a; FIG. 6b; col. 1, ll. 5-67; col. 2, ll. 1-67; col. 3, ll. 1-67; col. 4, ll. 1-67; col. 5, ll. 1-67; col. 6, ll. 1-67; col. 7, ll. 1-52; and particularly col. 1, ll. 55-65; and col. 4, ll. 10-26) implicitly shows “storing said subscriber advertising profile at the server. . . .” and it would have been obvious to modify and interpret the disclosure of Alberts cited above as implicitly showing “storing said subscriber advertising profile at the server. . . .”, because modification and interpretation of the cited disclosure of Alberts would have provided means that “*allows ads to be served in a highly flexible and accurate manner a desired number of times throughout the day. . . .*” (see Alberts (col. 2, ll. 30-40), based on the motivation to modify Alberts so that “*ads can be served based on different triggering events, such as the location of the user the type of information being accessed by the user, or the categories accessed. . . .*” .” (see Alberts (col. 2, ll. 30-40).

As per dependent claims 2-8, Alberts shows the method of claim 1 and subsequent base claims depending from claim 1.

Alberts (the ABSTRACT; FIG. 1; FIG. 2; FIG. 3; FIG. 6a; FIG. 6b; col. 1, ll. 5-67; col. 2, ll. 1-67; col. 3, ll. 1-67; col. 4, ll. 1-67; col. 5, ll. 1-67; col. 6, ll. 1-67; col. 7, ll. 1-52) implicitly shows all of the elements and limitations of claims 2-8; however,

Alberts lacks explicit recitation of some of the elements and limitations of claims 2-8.

"Official Notice" is taken that both the concepts and the advantages of all of the elements and limitations of claims 2-8, were well known and expected in the art by one of ordinary skill at the time of the invention because; for example, it would have been obvious to modify and interpret the disclosure of Alberts cited above as showing all of the elements and limitations of claims 2-8, because modification and interpretation of the cited disclosure of Alberts would have provided means that *"allows ads to be served in a highly flexible and accurate manner a desired number of times throughout the day. . . ."* (see Alberts (col. 2, ll. 30-40), based on the motivation to modify Alberts so that *"ads can be served based on different triggering events, such as the location of the user the type of information being accessed by the user, or the categories accessed. . . ."* (see Alberts (col. 2, ll. 30-40)).

Independent claim 9 is rejected for substantially the same reasons as independent claim 1.

As per dependent claims 10-16, Alberts shows the method of claim 9 and subsequent base claims depending from claim 9.

Alberts (the ABSTRACT; FIG. 1; FIG. 2; FIG. 3; FIG. 6a; FIG. 6b; col. 1, ll. 5-67; col. 2, ll. 1-67; col. 3, ll. 1-67; col. 4, ll. 1-67; col. 5, ll. 1-67; col. 6, ll. 1-67; col. 7, ll. 1-52) implicitly shows all of the elements and limitations of claims 10-16; however,

Alberts lacks explicit recitation of some of the elements and limitations of claims 10-16.

"Official Notice" is taken that both the concepts and the advantages of all of the elements and limitations of claims 10-16, were well known and expected in the art by one of ordinary skill at the time of the invention because; for example, it would have been obvious to

Art Unit: 3622

modify and interpret the disclosure of Alberts cited above as showing all of the elements and limitations of claims 10-16, because modification and interpretation of the cited disclosure of Alberts would have provided means that *“allows ads to be served in a highly flexible and accurate manner a desired number of times throughout the day. . . .”* (see Alberts (col. 2, ll. 30-40), based on the motivation to modify Alberts so that *“ads can be served based on different triggering events, such as the location of the user the type of information being accessed by the user, or the categories accessed. . . .”* (see Alberts (col. 2, ll. 30-40).

Additionally, Alberts discloses that ad can be targeted to profiled users and that ads can be targeted for particular times:

“(5) Alternatively, an advertiser may want a concentration or intensification of ads at particular times, perhaps in response to a profile of users, e.g., different times for children versus adults, or for people accessing the site from home versus work” (col 1, lines 43-50).

Notice that Alberts designates that times vary depending upon who the user is receiving the ad. For example, when an ad is slated for children then that ad could be targeted for time slots before 10pm. Then, when a user utilizes the system, the system would check if the user is a child and also what time it is. The ad slated for children would only be shown to children before 10pm.

Alberts further discloses targeting users based location, particular users, and/or time of day:

“(10) The system can predictively model the number of hits to control the distribution of serves, either to ensure even distribution, or to concentrate ads during particular times. The system also preferably has triggering information that allows ads to be targeted. Ads can be targeted to users seeking certain types of information, e.g., on a yellow pages system or on a search engine, access to "photography" could cause the serving of an ad for a manufacturer of film; to users from particular geographic locations; to particular users; or to users at different times of the day” (col 2, lines 15-25).

Alberts further discloses scheduling ads, scheduling ads based on user activities, adapting for time zones, adapting for regions, adapting for time regions:

“(27) While the counters are used to provide an appropriate balance in the numbers of serves for each ad relative to the others, other methods can be used to provide appropriate distribution throughout the day. FIG. 5 is a graph representing how usage might vary throughout one day from midnight to midnight (the graph here is merely illustrative and is not meant as a precise measure). Based on recurring patterns, such as when most people work, the time zones, and the day of the week, the number of hits to a particular service may be predicted based on prior experience. The hours of the day can be broken up into time regions that may be less frequent during certain non-peak times and more frequent during peak times, and the frequency with which hits are calculated can be varied from numbers of hits per day to number of hits per time periods, with the time periods being reloaded from the database to the ad server by the controller on a more frequent basis throughout the day. This approach, in effect, alters the granularity with which the hits are monitored. With this approach, the time

Art Unit: 3622

periods can vary in duration from short duration during peak times to longer duration during non-peak times" (col 6, lines 25-56).

Tso discloses advertisers and marketers targeting individual users based on profile, time, location, etc:

"(8) Advertisers and marketers who currently advertise on electronic services also have limited access to users and often can not focus their advertisements due to a lack of information for each user, including positional and demographic information.

(9) Thus, it would be desirable to have an electronic information distribution system which would bypass the limitations stated above" (col 1, lines 33-41).

Tso discloses individual subscriber profiles, storing profiles of subscribers at the server, checking the current time of the user to the time significance of the advertisement, time and location based advertising, and time and location based advertising that takes the user profile into account, and scheduling advertising (Fig. 3, server a17; Fig. 5; and below):

"(62) In addition to the traffic report example as described above, another example would involve the use of the user's profile in addition to the time of day and the location of the user for businesses which wish to advertise their services or products depending on additional criteria. For example, eating establishments may wish to send advertisements to the users located near each establishment's respective vicinity close to mealtimes. These advertisements may contain menus or daily specials and, in addition to being targeted to specific users based on their location and the time of day, can also be targeted based on the user's food preferences in subscriber database 53. Thus, for example, if a user is a vegetarian, schedule/resource controller 61 would only forward the InfoBites from vegetarian eating establishments or only

Art Unit: 3622

forward the InfoBites containing the vegetarian specials from the eating establishments” (col 15, lines 50-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Tso’s individual subscriber profiles to Albert’s user profiles. One would have been motivated to do this in order to better target content to users.

Response to Arguments

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection. Please particularly note the section above starting with, “Additionally, Alberts discloses that ad can be targeted. . .”.

Also, note that a 35 USC 101 rejection has been added. Claims 1-8 do not explicitly utilize the technological arts. Please note the full 35USC 101 rejection above.

Examiner further notes that it is the Applicant’s claims as stated in the Applicant’s claims that are being rejected with the prior art. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to.

Art Unit: 3622

Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a) Gerace (5,848,396) discloses profiling individual users;
- b) Bandera (6,332,127) discloses time and location based content;
- c) Owensby (6,647,257) discloses a user profile and time and location based content;
- d) Powar (6,285,991) discloses a user profile and time and location based content;
- e) Wolfe (6,161,142) discloses a user profile and time and location based content.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571) 272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arthur Duran
Patent Examiner
5/12/05